

Medway Plastics Corporation: A CHP Success Story

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2nd Annual EPA CHP Partnership Meeting

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Who is Medway Plastics (MPC)?

- MPC is a state-of-the art injection molding plastics company located in Long Beach, California
- Product offering: beverage containers, produce baskets, bread trays, audio speaker enclosures and office furniture
- Electric provider: Southern California Edison
- Gas company: Long Beach Gas Company



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What Are Their Operations?

- 24/7 Operation
- Chilled water required in injection molding process
- The energy crisis constrained operations:
 - Rented portable generators (\$100k per year)
 - Shed load
 - Worked odd shifts and weekends



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What Options Did They Consider?

- Option 1: Single 1000 kW genset with heat recovery (CHP) and absorption chiller
 - Lower first cost
- Option 2: Multiple CHP units rated at 375 kW each and absorption chiller
 - Greater availability



The Final Decision

- Option 2 with higher availability and redundancy suited the operation best
- Turnkey design/build by equipment supplier
- Equipment contained in 30 foot ISO containers with acoustically treated louvers
- Three way catalyst to meet SCAQMD emissions levels

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The Results

- Start-up occurred in March of 2003
- Installed Cost: \$1.5 million
- CHP facility saves the customer nearly \$300k/yr
- Payback: 3 years¹

¹ Including Self Generation Rebate



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